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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,865	01/15/2002	Reuel S. Orocio		5116

7590 04/09/2004  
Jack C. Munro, Agent of Record  
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EXAMINER

EDGAR, RICHARD A

ART UNIT	PAPER NUMBER
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3745

DATE MAILED: 04/09/2004 //

Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 11

Application Number: 10/047,865  
Filing Date: January 15, 2002  
Appellant(s): OROCIO ET AL.

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Jack C. Munro  
For Appellant

**EXAMINER'S ANSWER**

**MAILED**  
**APR - 9 2004**  
**GROUP 3700**

Art Unit: 3745

This is in response to the appeal brief filed 20 February 2004.

A statement identifying the real party in interest is contained in the brief.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

No amendment after final has been filed.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 1 and 2 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

Art Unit: 3745

**(9) Prior Art of Record**

US 2002/0106277 A1	Chapman	8-2002
5,927,947	Botros	7-1999

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1 and 2 are rejected under 35 U.S.C. § 103(a). This rejection is set forth in prior Office Action, Paper No. 8.

**(11) Response to Argument**

***Issue 1***

Appellants have first argued that the Chapman reference (US 2002/0106277 A1) shows a backflow preventing device 17, and not an inlet to an eye of an impeller as is claimed in claim 2. The examiner disagrees with Appellants' statement.

As those skilled in the art of pumps and blowers know, a backflow preventing device such as that illustrated by the Chapman reference, serves to separate high pressure fluid, which has been acted upon by the blower or impeller blades, from low pressure fluid, which has not been acted upon by the blower or impeller blades. Therefore, it is submitted that the backflow preventing device disclosed by the Chapman reference defines an inlet to an eye of the impeller by separating the high pressure fluid (outlet) from the low pressure fluid (inlet), which allows the low pressure fluid to be acted upon by the impeller blades.

**Issue 2**

Appellants next argue the modification of the Chapman reference (US 2002/0106277 A1) in view of the Botros patent (US 5,927,947). Appellants first state the modification is not understood, and then describe a modification where the backflow prevention device of the Chapman reference is positioned toward the hub. This is not the modification relied upon by the examiner. Reviewing the rejection in paper number 8, page 4, it can be understood that the *drive sleeve* of the Chapman reference is extended to be recessed within the hub, and there is no modification of the backflow preventing device, as alleged by Appellants. The hub of the Chapman reference is shown to extend perpendicular to the inlet flow and the drive sleeve extends with the motor shaft, opposed to the fluid flow direction. Such a configuration will cause flow turbulence and lower the efficiency of the impeller. The design of the Botros patent allows for a more laminar flow of fluid along the hub, and the drive sleeve is hidden within the hub, thereby not obstructing the fluid flow path.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Art Unit: 3745

Since it was within the level of ordinary skill at the time the invention was made that impeller smooth surfaces and recessed components, such as those shown in the Botros patent, as opposed to the impeller perpendicular surfaces and obstructions illustrated by the Chapman reference, provides less turbulent fluid flow and more efficient impeller operation, and no disclosure of Appellants is necessary in making this determination, the examiner's reconstruction is proper.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
Richard Edgar  
Examiner  
Art Unit 3745



RE

April 5, 2004

Conferees

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